

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY

MEETING OF APRIL 4, 1950

A regular meeting of the Society was held at the American Museum of Natural History; President Dr. Forbes in the chair. There were fifteen members and eight guests present.

Dr. Forbes extended the deadline for exhibits until the meeting of April 18. The exhibit will be held in the 77th Street Foyer of the Museum and will open at the last meeting in May.

Dr. Forbes then announced that the required quorum being present, and that suitable notification having been given in accordance with Section X., the Society would vote on whether to amend Article I., Sec. IV. of the by-laws. The amended Section was passed unanimously.

Dr. Forbes then introduced the speaker of the evening, Dr. Herbert Ruckes, Professor of Biology at the College of the City of New York and Past President of the Society. Dr. Ruckes described his experiments on the amputation of antennæ in *Euschistis varialaris* (Hemiptera, Pentatomidæ). He divided his problem into three parts:

1. In the transformation of nymph to adult, how is the fifth antennal segment formed?
2. How does the amputation of an antenna effect the problem of Isometry?
3. What role does the hypodermis play in the role of regenerative growth?

His chief conclusions were:

1. The fifth adult antennal segment arises by division of the second nymphal.
2. The antennæ tend to grow to be equal in length, in short, there is an attempt to establish symmetry.
3. That when certain hypodermis is excised, the remaining tissue can compensate for the injury and in so doing assume new values and functions.

A discussion followed on histological aspects.

LOUIS S. MARKS, *Secretary.*

MEETING OF APRIL 18, 1950 .

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History; President Dr. Forbes in the chair. There were fourteen members and eight guests present.

President Forbes then read the following letter from our new honorary member and Editor Emeritus, Mr. Weiss, thanking the Society for the bestowed honors:

19 North 7th Ave.
Highland Park, N. J.
April 8, 1950

Dear Doctor Forbes:

The announcement in the March issue of the Journal was the first official word I have had of my election to honorary membership in the New York

Entomological Society and also of my appointment as editor emeritus. And I wish to thank the Society for its action.

For the most part, editing the Journal for more than 25 years was a pleasure, and I deserve no special recognition. Nevertheless, I am human enough to be pleased by the Society's action and I am very grateful for the honor which they have bestowed upon me.

Sincerely yours,
(signed) Harry B. Weiss

Mr. Sam Harriot then announced the first Society field trip, to be held on Sunday, May 14. The group will meet at the end of the Pelham Bay Line. In case of rain the trip will be held Sunday, May 21. Mr. Harriot will meet the group. Members will bring lunch and collecting equipment.

Mr. Pohl announced that on his trip to Paris he had visited the new director of the Museum of Natural History.

Mr. Comstock announced that Bernard Lewis had been appointed Director of the Institute at Kingston, Jamaica, B. W. I.

Mr. Teale told the membership that the U. S. D. A. Yearbook for 1951 will be on insects.

The speaker of the evening, Dr. Stanley W. Bromley, Chief Entomologist, Bartlett Tree Research Laboratories, then gave the following paper:

TREES AND TREE INSECTS, WITH SPECIAL REFERENCE TO THE DUTCH ELM DISEASE

The message I bring is one of hope—new hope for our elms. Our elm trees can be saved,—we should never think of simply writing them off.

When the public asks a simple question they want a simple answer. When they asked the question "why are my elm trees dying?" they were given the simple answer "Dutch elm disease." Whether this answer was true or not was immaterial, irrelevant and inconsequential—that is, until the remedies began to fail. Then they asked the original question all over again. The trouble is that the answer is not so simple as all that. There are many things wrong with elm trees but that every one of them is Dutch elm disease is simply not true.

The average person thinks of the Dutch elm disease in terms of another tree disease—the chestnut blight or bark canker, that devastating fungus that killed out our native American chestnuts—but the two are entirely unlike. It is not the same problem at all.

To the popular mind the cause of all dying elm trees is the Dutch elm disease. In reality there are two problems of equal importance: (1) The bark beetle and (2) the fungus known as *Graphium ulmi* or *Ceratostomella ulmi*. Since there are two agents of destruction, so must the answer to them be twofold: First to control the bark beetles and second to control the fungus disease. I think we are well on the way toward the solution of both. You have to remember, however, that you cannot separate the two. You cannot expect to get satisfactory results by trying to control only one. Both problems are inextricably interwoven. Either the bark beetle or the fungus can

kill an elm by itself but in the majority of cases it is the combination of the two that does the execution.

Healthy, vigorous, well-cared-for elms are least prone to attack by either the bark beetle or the fungus.

Let me tell you something about the history of elm troubles in Stamford, Connecticut, where we have had to live with the Dutch elm disease for almost twenty years. During the first onrush of both disease and beetle in the early thirties, treatment by sanitation was generally adopted. So effective was it that the *Scolytus* beetle actually became rare in certain localities.

Then came the war and a general letdown in tree care. Trees were neglected. They suffered from storms, drought, and cankerworm and elm leaf beetle defoliations. They became weakened; thus the stage was set for a great outbreak of bark beetles sweeping the fungus along with them.

What was the relative importance of factors bringing about the dying of elms in Stamford, to restrict the discussion to one particular area? Neglect or lack of care first of all. What next? Well, a recent survey of street and park trees came up with some very significant and startling figures. Here they are:

Of the elms that have died during the past twenty years in Stamford, 55 per cent (or more than half) were killed by what might be characterized as "acts of man"—the actual agents being the axe, saw, steam shovel and bulldozer used in construction work, widening streets, installing sewers, sidewalks and the like. Indifference and carelessness in most cases.

About 15 per cent died by "Acts of God"—such as hurricanes, ice storms and droughts.

About 30 per cent of the elm deaths could be allocated to Dutch elm disease in the broad or popular sense which includes bark beetle and other insect destroyers as well as the less common vascular diseases, *Cephalosporium* and *Verticillium*.

Indifference and neglect were the primary causes of mortality. Had those elms been kept healthy through a program of spraying, of feeding to promote tree vigor, and last but by no means least in importance, sanitation to remove the breeding places of the *Scolytus* beetle, and had man been kinder to them as he laid new roads and sidewalks and bulldozed areas for new houses many of those elms would be still standing.

During the past few years we at the Bartlett Tree Research Laboratories have been called upon for diagnosis of injuries to hundreds of elm trees. Of these all were more or less suspect of Dutch elm disease. Yet more than 50 per cent were found to be suffering from defoliation caused by either elm leaf beetle feeding or from the disastrous effects of the *Gnomonia* leaf spot fungus. About 25 per cent were killed by the combination of Dutch elm disease and *Scolytus* beetle, while 5 per cent were killed by the *Scolytus* alone, 10 per cent by the native elm bark beetle, 5 per cent by scale and the remaining 5 per cent showed *Cephalosporium* or *Verticillium* wilt (both vascular fungus diseases).

The European elm bark beetle or *Scolytus* has been relegated too long to a secondary role. It is a pest of primary importance in its own right.

As the forces of elm destruction gather momentum, the elm *Scolytus* is emerging as the No. 1 enemy of the elm both in our region and elsewhere. Even in Ohio, "the battleground of the elms," it is a question as to whether more elms are being killed by *Scolytus* or by the virus of Phloem necrosis. In Columbus I have seen the ground underneath elm trees so littered by twigs and green leaves chewed off by *Scolytus* that it resembled the work of thousands of squirrels.

As is true of most bark beetles, *Scolytus* is a cambium feeder and must have living tissue on which to subsist. It attacks elms that are weakened by drought, by defoliation of other insects, by malnutrition and other causes.

When *Scolytus* attacks a tree it may do so in great numbers and so severe is the girdling of the cambium layer that it can readily kill an elm. It is a battle to the death. Either the tree kills the beetle or the beetle kills the tree.

Now about control. The Department of Agriculture scientists recommend two sprays of DDT for *Scolytus* beetle, one just before the leaves open and the second about ninety days later. We have found that a considerable measure of control may be obtained by spraying with arsenate of lead. Recent tests which I have conducted show that spraying with methoxychlor—the new insecticide which lacks many of the objectionable qualities of DDT, looks extremely promising for *Scolytus* control. Methoxychlor is effective on a greater number of insects than is DDT while it is less toxic to humans and warm-blooded animals as well as less injurious to foliage.

For combatting the Dutch elm fungus—once it has become established in a tree—chemotherapy—(the use of internal medication)—has opened up new avenues. Carolate, which has proven effective experimentally in suppressing and combatting the fungus when it has been detected in its early stages, holds great promise. However, no one medication can replace normal consistent tree care.

In the case of Stamford, as well as many other places, this is like the army demands during war. A thing had to be done not only now—immediately—but it had to be done yesterday.

LOUIS S. MARKS, *Secretary.*

MEETING OF MAY 2, 1950

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History; President Dr. Forbes in the chair. There were fifteen members and eight guests present. The Executive Committee minutes of the meetings of April 4 and April 25 were read.

The resignation of the treasurer, Mr. John C. Pallister, and the appointment by the Executive Committee of a new treasurer, Mr. Arthur Roensch, were made known to the Society.

President Forbes then appointed an Auditing Committee to consist of: Dr. A. B. Klots, Mr. E. I. Huntington and Dr. Willis Gertsch.

Mr. Harriot reported for the Field Committee, that another trip will be held in June to the Boonton, New Jersey, area. The secretary will send notices to members in the New York area.

Dr. Luey Clausen, Chairman, reported for the Exhibit Committee. The exhibit will open May 16. Fourteen contributions have been entered, including photographs, publications (popular and scientific) and drawings for taxonomic identification.

Dr. Creighton's book, "Ants of North America," being Vol. 104 of the Bulletin of the Museum of Comparative Zoology, was exhibited.

Mr. Teale showed the members the English edition of his "Dune Boy" which contains artists sketches of Mr. Teale as a boy.

Dr. Forbes announced the death of one of America's most famous entomologists, Dr. L. O. Howard, an honorary member of the New York Entomological Society. Cognizance of this will be taken in the Journal.

Dr. Forbes introduced the speaker of the evening, Dr. Caryl P. Haskins who spoke on "Problems of Sex and Caste Determinations in the Social Hymenoptera"

The president announced that there would be no formal meeting on May 16, but that the regular meeting time would be devoted to the viewing of the Society exhibits.

LOUIS S. MARKS, *Secretary*.

MEETING OF OCTOBER 3, 1950

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History; President Dr. Forbes in the chair. There were twelve members and five guests present. The Executive Committee minutes of the September 12 meeting were read.

The president reported to the Society on the condition of Mr. Chris Olsen as of the 18th of September.

Mr. Roensch reported for the Field Committee. The official trip to Boonton was a success; five members and three guests were present.

Dr. Forbes reported for the Exhibit Committee. Our exhibit which was on display from May 16 to about June 16 filled the 77th Street foyer of the Museum. There has been some thought on the part of officers, trustees, members and the Committee as to whether a small foyer exhibit might not be more effective.

The following names were proposed for membership:

Mrs. Su Zan Swain, 406 Park Avenue, East Orange, New Jersey.

Dr. James A. Mullen, Biological Laboratory, Fordham University, New York 58, New York.

Mr. John T. Woodland, Harvard Biological Laboratories, Cambridge, Massachusetts.

Mr. Jacob Huberman, 1 East Fordham Road, The Bronx 58, New York.

The Secretary then read letters from N. D. Riley, Hon. Secretary, Royal Entomological Society and from the IX. International Congress of Entomology. A delegate will probably be named by the Executive Committee at the appropriate time.

Dr. Forbes then explained the Society will be permitted to meet in Room 129 until such time as the Civilian Emergency Committee needs the room. He further announced that the mailing and membership lists of the Society had been brought up to date. The September Journal will be out in mid-October, this with the new editor's apologies and regrets. The meetings of the Society will be announced in the Calendar of the Department of Education of the American Museum of Natural History.

The situation with regard to our current relationship with the New York Academy of Sciences was clarified in response to a question put by Dr. King.

The members then reported on their summer activities. Reports were made by Messrs. Teale, Gaul, Vishniac, Schneirla, Swain, and others.

Dr. Swain noted the death of Brayton Eddy, of the New York Zoological Park.

L. S. MARKS, *Secretary*.

MEETING OF OCTOBER 17, 1950

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History; President Dr. Forbes in the chair. There were sixteen members and twelve guests present.

Dr. Forbes read a letter from Mr. Olsen in which he explained his forthcoming operation and his inability to be the speaker of the evening as originally planned.

Mr. Teale called attention to the latest published example of Mr. Olsen's art, notably the color plates in the new "Field Book of Sea Shore Life" by Miner.

Dr. Forbes announced that the September Journal had been mailed.

The following persons proposed at the October 3 meeting were then elected to active membership: Mrs. Su Zan Swain, Dr. James A Mullen, John T. Woodland and Jacob Huberman.

The President then inquired if any of the members were going to Europe this summer in connection with scientific meetings held abroad. Mr. Lucien Pohl announced that he might make such a trip.

Dr. Forbes then gave the paper of the evening on "Some Medical Entomological Problems in Korea". He showed, by means of slides, how the native Korean habits and customs gave rise to certain sanitary problems, some of them with a highly amusing aspect.

Several of the members and guests who had sojourned in the Orient in connection with the business of the last war then engaged in a general comparative discussion of Oriental sanitary problems.

LOUIS S. MARKS, *Secretary*.

MEETING OF NOVEMBER 21, 1950

A regular meeting of the Society was held at the American Museum of Natural History, President Dr. Forbes in the chair. There were fifteen members and nine guests present.

Because the notice of meetings of the various allied societies is no longer sent out by the Academy, Dr. Forbes called on Mr. Teale for information about meetings of the Brooklyn Society. Mr. Teale announced that the speaker for the December meeting will be Mr. Gaul on Insect Flight. At the January meeting, Dr. Bequaert will talk on the Origin of the Hippoboscidae. Mr. Teale then gave details as to the meeting place.

There was no new or old business.

Dr. Swain, Chairman of the Program Committee, introduced Dr. Leonard Goss of the New York Zoological Park. Dr. Goss is the veterinarian at the Bronx Zoo. Dr. Goss surprised most members of the Society when he stated that external insect parasites are not a problem at the zoo, contrary to popular belief. The talk was illustrated by a movie.

Dr. Forbes announced that the first December meeting will be a panel on the relatives of insects, conducted by Drs. Gertsch and Armstrong of the Museum. Audience participation and discussion is welcome at these panel meetings.

L. S. MARKS, *Secretary*.

MEETING OF DECEMBER 5, 1950

A regular meeting of the Society was held at the American Museum of Natural History; President Dr. Forbes in the chair. There were seventeen members and fourteen guests present.

The president announced the appointment of a nominating committee composed of Drs. Schneirla and Spieth, with Dr. Spieth as Chairman.

The minutes of the Executive Committee meeting will be read at the December 19 meeting. Dr. Forbes parenthetically observed that we are not in bad shape financially.

There were two proposals for membership:

Senhor Paulo Nogueira-Neto, Av. Cidade Jardim, 264, São Paulo, Brazil, and Mr. Anthony R. Conte, Fordham University, New York 58, New York.

Dr. Donohoe then displayed some new paintings by Mr. John Cody.

Dr. Forbes reported on Mr. Huntington's telephone conversation with Mr. Comstock. Mr. Comstock is doing better.

The Society then proceeded with the paper of the evening, which was a panel discussion on Insect Relatives by Drs. Gertsch and Armstrong, both of the American Museum of Natural History. Many new, novel and interesting facts on Arachnids and Crustaceans were presented. There was a question and answer period following each discussion.

Dr. Forbes announced that the paper of the December 19 meeting would be on distribution and speciation in butterflies by Dr. A. B. Klots.

L. S. MARKS, *Secretary*.

MEETING OF DECEMBER 19, 1950

A regular meeting of the Society was held at the American Museum of Natural History, President Dr. Forbes in the chair. There were sixteen members and five guests present.

The President announced the appointment of an Auditing Committee consisting of Mr. E. I. Huntington, Dr. James Forbes, and Dr. Harold R. Hagen, with Dr. Hagen as Chairman.

Senhor Paulo Nogueira-Neto and Mr. Anthony R. Conte were elected to membership.

Dr. Forbes announced that Dr. Vishniac had been awarded a First Prize by the Biologic Photographic Association.

It was suggested that the Annual Exhibit be held in conjunction with the second meeting in May. Members would bring in their current work and discuss it.

Dr. Klots informed the Society of the First Annual Meeting of the Lepidopterists Society, to be held the 29th and 30th of December in Room 419, American Museum of Natural History. There will be a symposium, papers and an extensive exhibit.

Dr. Swain then introduced the speaker of the evening, Dr. A. B. Klots, who spoke on "Distribution and Speciation in North American Butterflies".

For the past 27 years, Dr. Klots has been studying the distribution of the Alpine-Arctic butterfly fauna. The field work has involved 104 collections in 22 different mountain ranges. Dr. Klots pointed out that while the connection of the arctic fauna with that of the mountain tops has long been recognized, a third factor—the northern bogs—must be recognized as islands of arctic-alpine fauna. He then discussed the role of sub-speciation in the various areas of North America for certain genera. Using two species of *Boloria* as examples, he showed how one species is little changed in various parts of the world, whereas the other undergoes extensive sub-speciation.

L. S. MARKS, *Secretary*.

MEETING OF JANUARY 2, 1951

The Annual Meeting of the Society was held January 3, 1951, at the American Museum of Natural History, President Dr. Forbes in the chair. There were 14 members and 10 guests present. The minutes of the Executive Committee meeting of December 5 were read.

The officers then gave their reports for the year to the Society.

The President thanked the other officers and the Executive, Field, Exhibit and Program committees for their cooperation. He noted the two field trips conducted by the Field Committee. The Exhibit Committee, headed by Dr. Clausen, is not contemplating the same type of exhibit we have had in the past because we cannot get the available space at the time we want it.

The President further reported that Mr. W. P. Comstock had asked to be relieved of his duties as Delegate to the New York Academy of Sciences.

The Secretary's report, and the Treasurer's report, approved by the Auditing Committee, were read and are appended to these minutes.

Dr. Spieth then reported for the Nominating Committee. The nominations follow:

President—Mr. Albro T. Gaul
 Vice-President—Dr. Lucy Clausen
 Secretary—Mr. Louis S. Marks
 Assistant Secretary—Mr. Leon Siroto
 Treasurer—Mr. Arthur Roensch
 Assistant Treasurer—Mrs. Patricia Vaurie
 The Executive Committee—Dr. Cazier
 (amended)

Mr. Huntington
 Mr. Teale
 Dr. Hagen
 Dr. Swain
 Dr. Forbes

Editor of the Journal—Mr. Frank Soraci
 Associate Editor—Mr. Herbert Schwarz
 Editor Emeritus—Dr. Harry B. Weiss

Delegate to the New York Academy of Science—Mr. Herbert Schwarz

There being no further nominations, it was then moved by Mr. Harriot and seconded by Dr. Vishniac that the Secretary cast one ballot for the slate as amended.

In the absence of the new president, Dr. Forbes retained the chair.

Dr. Swain, chairman of the Program Committee, introduced the speaker of the evening, Dr. Roman Vishniac, who spoke on "Polarized Light and Entomology". By means of colored slides, Dr. Vishniac demonstrated the aid that polarized light could give the insect morphologist, particularly on the problem of sense organs in living insects.

L. S. MARKS, *Secretary*.

MEETING OF JANUARY 16, 1951

A regular meeting of the Society was held at the American Museum of Natural History, President Gaul in the chair. There were 13 members and 11 guests present.

The President appointed the following committees:

The Program Committee to consist of Doctors Vishniac, Swain and Spieth.

The Field Committee to consist of Mr. Harriot and Mr. Roensch.

The Publication Committee to consist of Messrs. Soraci, Schwarz, Teale and Sherman.

Dr. Forbes then read a letter he had sent to Mr. Comstock on the latter's resignation as Delegate to the New York Academy of Sciences.

There being no further business, the speaker of the evening was Dr. Gardner on "The Citrus Black Fly in Mexico." One of the high points of his

talk which interested the members was the means used to ship live parasites halfway around the world.

LOUIS S. MARKS, *Secretary*.

MEETING OF FEBRUARY 6, 1951

A regular meeting of the Society was held in the American Museum of Natural History, President Albro T. Gaul in the chair. Sixteen members and two guests were present.

Mr. Huntington reported that Mr. Comstock was critically ill.

Dr. Herman T. Spieth, the speaker of the evening, presented an interesting talk entitled "Mating Behavior and Breeding Site of *Drosophila virilis* and its Relatives." A detailed account of over 600 observations on the mating behavior of *Drosophila virilis*, *americana americana*, *americana texana*, *novamexicana*, *montana* and *laticola* was given. Males are extremely aggressive and the females equally receptive. The geographical distribution of each species was described and the ecological relationships were pointed out. *Drosophila virilis* is a "domestic," rather numerous species found around human habitations such as produce houses, whereas the other species in the group are "wild" occurring only near the edges of bodies of water and never in large numbers.

Of particular interest was Dr. Spieth's account of his search in Minnesota for the breeding ground of *Drosophila laticola*. Adults of this species were collected and eggs, larvæ and pupæ of what was presumed to be this species were discovered under the bark of decaying aspen logs close to the shore of a small pond. Adults reared from these eggs, larvæ and pupæ turned out to be morphologically very similar to *laticola*. Upon further examination by a geneticist however, distinct chromosomal differences were found. It was decided that a new species of sympatric to *laticola* was involved. Also of interest was a new species of Cloropid fly found by Dr. Spieth associated with the new species of *Drosophila* in the aspen logs.

The presence of full species, incipient species and subspecies in this group of *Drosophila* makes it one of great interest to the student of genetics and evolution.

Considerable discussion followed Dr. Spieth's talk.

S. C. HARRIOT, *Acting Secretary*.

MEETING OF FEBRUARY 20, 1951

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History, President Gaul in the chair. There were eighteen members and six guests present.

Dr. Forbes proposed, on behalf of the Executive Committee, the name of Mr. Ernest L. Bell for Honorary membership in the New York Entomological Society. The motion was seconded by Mr. Marks, and passed by the Society. The Secretary will notify Mr. Bell of his election.

It was further announced that the Executive Committee has designated Mr. Cyril Dos Passos and Mr. Lucien L. Pohl as corepresentatives of the

the New York Entomological Society to the IX (Ninth) International Congress of Entomology to be held in Amsterdam, August 17-24, 1951.

The deaths of J. C. Crawford and S. A. Rohwer were noted.

The speaker of the evening, Mr. Richard H. Pough, Curator of Conservation, American Museum of Natural History, was introduced by Dr. Swain. The title of his talk was "Insect Conservation."

Mr. Pough spoke primarily of the work of the "Nature Conservancy" in its attempt to conserve typical ecological environments. This mission is not an easy one, as many of the primitive types have either disappeared or are rapidly disappearing before the onslaught of civilization. Contrary to popular opinion, the National Parks are not and cannot be made areas of this type because they are designed for recreation and scenic preservation only. The large Foundations are not interested in this idea because of the long-term aspect. An interesting discussion followed Mr. Pough's remarks.

LOUIS S. MARKS, *Secretary*.

MEETING OF MARCH 6, 1951

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History, President Gaul in the chair. There were ten members and seven guests present.

The minutes of the Executive Committee meeting of February 20 were read.

There being no further business, the Society heard the paper of the evening, Mr. John Pallister on "Collecting Insects." With many personal anecdotes in illustration, Mr. Pallister detailed methods which he has found highly successful. He also exhibited various types of equipment that he has used. A general discussion followed on field preservation and shipment.

ANTHONY R. CONTE, *Acting Secretary*.

MEETING OF MARCH 20, 1951

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History, President Gaul in the chair. There were thirteen members and three guests present.

The Secretary outlined what had been done in connection with the Ninth International Congress of Entomology. He then read the acceptance letter of Mr. Lucien Pohl, one of the co-delegates.

The Secretary, later in the meeting, read a note of appreciation from Mr. Ernest L. Bell on his election to the status of an honorary member.

Mrs. Alice W. Hopf, 136 West 16 Street, New York, New York, was proposed for membership.

The Society then heard the speaker of the evening, Mr. Stuart D. Whitlock of the Bureau of Entomology and Plant Quarantine, on "Plant Quarantine Problems of the Port of New York." Mr. Whitlock outlined ways that plant material entered the country. He then spoke of the duties of the

Bureau at the Port of New York. One of the major problems at present is to prevent the introduction of the Golden Nematode. In a series of colored lantern slides, Mr. Whitlock illustrated the diversity of crop pests that have been intercepted at New York Port.

Dr. Forbes called the attention of the members to Dr. Vishniac's exhibit of Photographs by Stroboscopic Light on exhibit at the Museum.

LOUIS S. MARKS, *Secretary*.

MEETING OF APRIL 3, 1951

A regular meeting of the Society was held in Room 129 of the American Museum of Natural History, President Gaul in the chair. There were twenty members and guests present.

Mrs. Alice W. Hopf, 136 West 16 Street, New York, New York, was elected to membership.

Mr. Herbert Schwarz reported on the condition of Mr. William P. Comstock. He had seen him on two occasions. Mr. Schwarz said Mr. Comstock would be happy to see friends, and noted that Mr. E. I. Huntington had been to see Mr. Comstock. Mr. Gaul thanked Mr. Schwarz for his report on behalf of the Society.

The Field Committee announced the first field trip is tentatively set for May 13.

Mr. Gaul announced that the Brooklyn Entomological Society had discussed means of improving the status of entomology as a popular hobby. The idea of cooperation between the two Societies was also discussed.

President Gaul then displayed some photographs of the wings of insects.

The President then introduced the speaker of the evening, Mr. Chris Olsen, who spoke on "A Giant House-Fly Cast in Polyester Resin." Mr. Olsen's first act was to disown a papier-mache mantid that was on the speaker's table. He then outlined the advantages of plastic models over the usual wax models. The plastic models can be easily assembled and disassembled, and can be shipped greater distances without fear of breakage. The greatest amount of time in the construction of a plastic model is in the making of suitable molds. Two types of molds are necessary—plaster and flexible plastic. Mr. Olsen explained the difficulties encountered at each step, and the ingenious means he devised to overcome them. The model is now in the Boston Museum of Science.

For a full account of the construction of this model see, GIANT MODEL OF A HOUSE-FLY CAST IN POLYESTER RESIN, in THE MUSEUM NEWS, Vol. 29, No. 8, October 15, 1951. American Association of Museums, Smithsonian Institution, Washington 25, D. C.

L. S. MARKS, *Secretary*.